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ABSTRACT

This paper reports on an evaluation of the first 6 months of operation for two new services developed by Bibliographic Retrieval Services (BRS): the School Practices Information Network (SPIN), a computer-supported network of educational information providers at all organizational levels, and the School Practices Information File (SPIF), an online computer-searchable database of information of educational programs, practices, and instructional materials. SPIN and SPIF are briefly described, the evaluation design is reviewed and the population surveyed is described, and the data sources and data collection methods for the evaluation survey are outlined. Findings are then presented for the following areas: the frequency of SPIN use, the utility of SPIN, problems and needed improvements in SPIN, frequency of use and utility of SPIF, and user awareness of SPIF. General conclusions and discussion of overall results close the report. Five data tables accompany the text and the survey questionnaire is appended. (Author/JL)

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Year One Evaluation of SPIN and SPIF:

Procedures and Findings

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Paper presented at the annual meeting of the

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Year One Evaluation of SPIN and SPIF:

Procedures and Findings

Introduction

This paper reports on the evaluation of the first six months of operation for the School Practices Information Network (SPIN) and the School Practices Information File (SPIF). SPIN and SPIF are services developed by Bibliographic Retrieval Services, one of the world's largest suppliers of online computer search services. BRS is part of the Information Technology Group (ITG), a world-wide organization engaged in all areas of information processing and communication.

SPIN is a computer-supported network of education information providers at all organizational levels, particularly those that serve educators in local school districts. SPIF is an online, computer-searchable database of information on educational programs, practices, and instructional materials. Both services are described comprehensively in other papers reported in this session. For the purposes of the evaluation, it is important to reiterate key elements of the rationale for the creation of SPIN and SPIF. These are:

- Current nationwide sources of education information (e.g., ERIC, ECER) do not provide sufficient resources relating to programs, practices, and materials in a form that practitioners can access and use. An online searchable file of such information would provide a valuable resource for information providers and their clients.

- There is a need for a nationwide communication and exchange system for linking information providing organizations at all levels. Such a system can promote the sharing of resources not found in existing public,readily available files.

The purpose of the evaluation of SPIN/SPIF is to test the validity of the rationale - to determine the use and utility of the services. Subsequent

sections of this paper describe the phase one evaluation design, evaluation procedures, and findings. A final section provides conclusions, implications based on this first round of evaluation activities, and a discussion of conceptual and operational issues related to the further development of this nationwide communication, exchange and practice information system.

The SPIF/SPIN system was initiated in late March, 1981. Based on previous experience with the pilot test of the National Education Practices File for the National Institute of Education, BRS staff were aware that the growth of the Network and the use of the File would be gradual and slow. Given that summer is a very low utilization period for education information providers, it is safe to say that the SPIN/SPIF system is in the very early stages of development. For this reason the phase one evaluation, initiated in December, 1981, was viewed as a preliminary assessment. The focus was on the SPIN members and not on their clients.

SPIN/SPIF Evaluation Design

Evaluation Questions

The evaluation design for SPIN/SPIF is based on the following broad questions:

1. How are information providers using SPIN and SPIF?
2. How can SPIN and SPIF be improved to increase their utility to information providers?
3. What current and future unmet information service needs should be addressed by SPIN and SPIF?

A larger set of specific questions or variables of interest are vested within these broader information needs. With respect to SPIN, program managers had the following specific information needs.

- What is the frequency of use for each of the SPIN services (i.e., online member directory, online newsletter, and electronic mail)?
- How do information providers rate the utility of SPIN services?
- What kinds of communications are transmitted using electronic mail?
- Does the SPIN system operate as designed? Can users operate the system?

With respect to SPIF, program managers had the following information needs:

- How frequently is the database searched?
- Is the search system operating as designed? Can users search the database adequately?
- Do information providers find the database useful? Do their clients? Are some resources more useful than others? If yes, which ones?
- Is additional information sought from the contact person or organization cited in the abstract? How often? Are satisfactory responses (i.e., more information or materials) provided?
- Is the database royalty reasonable? Is the database judged more valuable than other education databases generally available?
- What other content is needed in SPIF? How else could SPIF be made more useful?

Data Sources

The principal data sources for responding to these evaluation questions were the SPIN members. In addition, documentation was maintained of key development and operational incidents. A SPIN Member Questionnaire was used to gather data relating to the specific evaluation questions (see Appendix A).

Data Collection Methods

The SPIN Member Questionnaire was sent to fifty-five SPIN members in mid-December, 1981. Although the Network had nearly seventy-five members at that point, program managers decided to survey only those who had been members through October, 1981. This was done to focus on members who had had sufficient time to become familiar with, and use, the system. A second mailing was used for non-respondents. Telephone interviews were conducted to obtain further information when necessary.

Of the fifty-five questionnaires sent out, forty-four (80 percent) were returned. Table 1 displays the return rate by type of organization. Of the forty-four questionnaires returned, nine were not completed and were not included in the analysis. The reason given by all nine respondents was that it was too soon for them to provide evaluative judgments about the services; they had not had enough experience with it. Thus, a total of thirty-five questionnaires were used in the analysis.

Evaluation Findings

Frequency of SPIN Use

SPIN members were asked to rate the frequency of their use of the three SPIN services - the member directory, the newsletter, and electronic mail. Table 2 displays the mean responses by group for each service. A four-point scale was used by respondents, with 1 indicating "never used", 2 indicating "rarely", 3 -"sometimes", and 4-"frequently." Mean scores for all three services ranged between rarely and sometimes. with the use of electronic mail slightly higher than the other two services. Respondents indicating no or rare use of the services were asked to comment on their responses.

Table 1

Return Rate by Organization Type

Organization Type	Number Sent	Number (%) Returned	Number Usable
National	6	5 (83)	4
National-Regional	12	10 (83)	8
State	17	15 (88)	13
State-Regional	10	8 (80)	6
School Districts	7	5 (71)	4
Publishers	2	1 (50)	0
Higher Education	1	0 -	0
Total	55	44 (80)	35

Table 2

Frequency of Use of SPIN Services

Organization Type	Directory	Newsletter	Electronic Mail
National (N=4)	2.75	2.5	2.5
National-Regional (N=8)	2.75	2.5	3.5
State (N=13)	2.92	2.54	2.92
State-Regional (N=6)	2.5	2.33	2.33
School Districts (N=4)	2.33	2.75	2.5
$\bar{X}$	2.72	2.51	2.86

The most frequent response was that they were not yet fully trained in the use of the system (five responses). Three respondents indicated they had had no reason to use one or more of the services. Telephone interviews with four low-user respondents indicated that, although technically capable of using the services, such use had not become a part of their normal routine. One respondent commented that she had no use for the services. Four respondents indicated that searching the online member directory was unnecessarily time consuming.

SPIN Utility

Table 3 displays the mean ratings of utility of the three SPIN services. A four-point scale was used by respondents, with 1 indicating "useless" and 4 indicating "very useful." Mean scores varied from a high of 3.00 to a low of 2.25, indicating a relatively uniform response across groups. Mean responses were similarly uniform. Comments by SPIN members indicated that non-response was attributable to non-use or to insufficient use to support a judgment. Other comments explaining low ratings (1 or 2) were: "need more training," "electronic mail needs more BRS promotion," and, "the online directory should be in print form."

Purposes for Using Electronic Mail

SPIN members were asked for what purposes they had used the electronic mail system. Table 4 displays their responses. Two respondents indicated that they had never used the electronic mail system and three indicated that they had used the system "once or twice, just to try it out." By far the most frequently indicated purpose was for routine communication. Routine

Table 3

Utility of SPIN Services

Organization Type	Directory	Newsletter	Electronic Mail
National (N=4)	3.00 (NR=1)	2.71 (NR=1)	2.50
National-Regional (N=8)	2.71 (NR=2)	2.71 (NR=1)	2.43 (NR=1)
State (N=13)	2.50 (NR=1)	2.25 (NR=3)	2.75 (NR=2)
State-Regional (N=6)	2.33	2.50	2.50
School Districts (N=4)	2.50 (NR=1)	2.75 (NR=1)	2.50 (NR=2)
$\bar{X}$	2.56	2.50	2.58

Table 4

Purposes for Using Electronic Mail

Organization Type	Routine Communication	Receiving Requests for Information	Responding to Requests for Information	Making Requests for Information
National (N=4)	3*	1	2	2
National-Regional (N=8)	7	4	5	3
State (N=13)	10	3	6	7
State-Regional (N=6)	4	1	2	2
School Districts (N=4)	3	1	1	1

*multiple counts)

communication included such purposes as notifying another SPIN member of an upcoming event and passing along other unsolicited work-related information. A good portion of routine communications appear to have been used for social exchange, unrelated directly to work.

Considerably less communication was done for requesting or responding to requests for information, although it appears that members did respond to requests for information more frequently than they received them. This discrepancy was explained by two members who indicated that they used the system for responding to requests for information that they had received via other channels (i.e., mail or telephone).

Problems and Needed Improvements in SPIN

Three members indicated that they had problems with the SPIN communications system, twenty-nine cited no problems, and three did not respond to the question. The problems cited were: "takes a while to get a response," "have had problems signing on," "I sent in a newsletter article and never heard," and "the [online] directory is too cumbersome to use." Even members who indicated that they had no problems were able to offer suggestions for improvements to the SPIN communications and networking system. Those cited were:

- provide printed member directory; update every six months
- the indexing system for the online directory is helpful; tell people about it
- need print newsletter
- need more training
- promote use of SPIN
- allow for remote entry of newsletter articles

- increase membership in vocational area
- get more people in Network
- allow for longer messages without signing off and on the system

Telephone conversations with SPIN members revealed that many were just getting used to a new way of communicating and that the experimentation period was just phasing out. Most members indicated that they planned to use the system more frequently in the future.

Frequency of Use and Utility of SPIF

SPIN members were asked to indicate the frequency of their use of the SPIF database and their ratings of its utility. Table 5 displays the responses and demonstrates the generally higher mean ratings for SPIF than for SPIN. Across all organization types the frequency of use ratings ranged from 2.75 to 3.23, with a mean of 2.99. Utility ratings were somewhat higher, ranging from 3.00 to 3.50, with a mean of 3.20. Only two respondents indicated no use of SPIF and gave as a reason lack of adequate training to search the database. No respondent indicated that the database was "useless," although three respondents stated that the file was still relatively small in size or scope, thus limiting utility. SPIN members were aksed whether their clients found information from the SPIF database useful. Twenty-seven responded positively, with the remainder not responding. Based on comments from members, non-response indicated that they had no way of determining clients' use or evaluative judgments.

Only eleven of the thirty-five SPIF users (33 percent) indicated that they attempted to contact people cited in the abstracts to obtain additional information. Of these, all indicated that they were satisfied with the response. The large number of members not attempting to collect additional

Table 5

Frequency of Use and Utility of SPIF

Organization Type	Frequency of Use	Utility
National	3.00	3.00
National-Regional	2.88	3.13
State	3.23	3.31
State-Regional	2.75	3.00
School Districts	2.75	3.50
$\bar{X}$	2.99	3.20

information was divided into two groups. Four indicated they didn't try, and eighteen (50 percent) indicated they left such follow-up to their clients. Two members provided no explanation for their non-response. The most typical request for information was for sample materials or for additional program descriptions. In some cases, the additional information was requested and received through a telephone contact.

The majority of respondents (21/35, 64 percent) indicated that they found the SPIF database to be more valuable than others available to them. Eight (24 percent) found it less useful and four (12 percent) said it was about equally valuable. Comments accompanying the response of lower utility dealt with the relatively small size and scope of the file and with the need for greater coverage in certain areas. Four members indicated that the royalty on the database ($10 per hour; $.10 per offline print) was not reasonable, but all other users said it was reasonable.

Only two users indicated that they had problems in searching SPIF. In both cases, the need for training was cited. One of these respondents indicated that they had problems in signing on to the system. Nearly half of the users (15/33) made suggestions for improving SPIF. The most frequently cited comments were:

- Haven't used it enough to evaluate fully (4 responses)
- SPIF records hard to "decode"
- Go after resources in high priority areas (2 responses)
- Provide special training for SPIF (3 responses)
- Need for more school-level practices
- Some records too long (2 responses)
- Add paragraph headings to make records self-explanatory (e.g., Resource Type for RT)
- Advertise beyond the online community
- Need to be able to save ERIC search strategy and execute on SPIF

Suggestions for additional content for SPIF were provided by six respondents. All others indicated they could think of no other content to be added. Suggestions included: "more focus on programs," "more vocational education curricula," and "more on bilingual education practices." Four respondents indicated that more records are needed in most content areas.

SPIF Awareness

A substantial majority of users (27/33) had undertaken no special awareness activities to advertise SPIF and its availability to their clients. Six member organizations did undertake in-house awareness. The reason most often given to explain the low incidence of awareness activities was the

lack of SPIF awareness materials. Several members suggested that BRS provide materials to them for use in their mailings to clients. A few members indicated that clients very seldom asked for a search of a particular database, leaving it up to the information provider to decide what sources were most appropriate.

Conclusions

Based on the data collected through the questionnaire and through telephone interviews, it appears that users of SPIN and SPIF found the systems technically adequate and useful in responding to their clients' information needs. The relatively large number of respondents reporting that it was too soon to evaluate the services,and the small number of non-respondents,indicate that all findings should be viewed as preliminary.

Ratings of frequency of use of SPIN services indicate that usage was moderate during the start-up period, with lack of training in system use being the most frequently cited explanation. Usage rates for SPIF were slightly higher but still were lessened by insufficient familiarity with searching the database. Utility ratings for SPIN were moderate and were significantly higher for SPIF. State level organizations tended to be higher users of SPIN and SPIF, but the distribution across all organization types are too narrow to demonstrate significant differences.

Ratings of SPIN's usefulness during the start-up period were moderate; those for SPIF were substantially higher. Despite problems normally associated with initiation (i.e., lack of sufficient training, experimentation, and limited size and scope), respondents indicated a generally high level of satisfaction with SPIN and SPIF. The database is rated as equal to or better than other available files by a substantial majority of users.

Respondents' comments indicate that phenomena related to technology change were operating, that members were just getting a feel for the system and beginning to discover how it might be used. Several respondents indicated that BRS should take more of a leadership role in advertising the service and demonstrating its users and utility to current and potential members.

Discussion

Based on the findings from this first evaluation phase, it appears that SPIN is growing rapidly in number of members, but somewhat less quickly in terms of use of SPIN/SPIF services. The anxiety of system managers that the evaluation might have been undertaken too soon is in part justified by the substantial number of respondents who indicated no, little, or moderate use. Another indication of this development was that nineteen respondents indicated that they would be willing to work with BRS in collecting client evaluation information in the future. It is too soon to conduct a survey of actual "end-users" of SPIF information. (The design for such an evaluation is complete and will be implemented during phase two evaluation activities.

A few operational changes in SPIN/SPIF operations were made even before formal evaluation information was available. Informal feedback indicated that searching the print directory was time consuming and costly. BRS staff prepared a printed directory and distributed it with the winter newsletter. Plans were made to update and distribute the directory with each quarterly newsletter. The online directory was to be used for updates occuring during the quarter. A printed version of the online newsletter was created in much the same way, in order to provide an indepth printed version of the online file.

Two significant content changes in the SPIF database were the inclusions of descriptions of commercial materials and instructional software for microcomputers. Both modifications were motivated by SPIN members and the file has begun to expand in these directions. Acquisition efforts in these and other areas are to receive increased attention in the coming year.

Because SPIN and SPIF are part of a BRS-supported R&D project, its long-term future will be decided by the nature and level of market demand. In the near term, the R&D effort will be guided by the evaluation of its users according to a wide range of process and outcome measures. Early indications are that the services are generally sound and useful and that demand for them is substantial. These indicants are gross measures at this stage, and further indepth assessment at both the information provider and end user levels will be necessary to substantiate and illuminate preliminary findings.

SCHOOL PRACTICES INFORMATION NETWORK

SCHOOL PRACTICES INFORMATION FILE

SPIN Member Questionnaire

Your T# _____ Person Responding _____

1. How frequently do you use:

	Never	Rarely	Sometimes	Frequently
a. SPIN member directory	1	2	3	4
b. SPIN newsletter	1	2	3	4
c. SPIN electronic mail	1	2	3	4
d. SPIF database	1	2	3	4

If you circled a 1 or 2 for any service, please explain:

a. _____

b. _____

c. _____

d. _____

2. How useful is the:

	Useless			Very Useful
a. SPIN member directory	1	2	3	4
b. SPIN newsletter	1	2	3	4
c. SPIN electronic mail	1	2	3	4
d. SPIF database	1	2	3	4

If you circled a 1 or 2 for any service, please explain:

a. _____

b. _____

c. _____

d. _____

over →

3. With respect to SPIF:

	yes	no
- Did your clients find the information useful?	☐	☐
- Did you contact people cited in the abstracts for more information?	☐	☐
- If yes, were you satisfied with the response?	☐	☐
- Is the royalty reasonable?	☐	☐
- Is the database more valuable than others available to you?	☐	☐
- Do you know how to submit items for inclusion in SPIF?	☐	☐

- If no, why not? _____

_____

- Explain "no" _____

_____

4. Is there other content that you would like to have available through SPIF? ☐ yes ☐ no

If yes, specify _____

_____

5. Have you undertaken any special awareness activities to advertise the availability of SPIF?

☐ yes ☐ no

Comment:

6. Have you encountered any problems in searching SPIF?

☐ yes ☐ no

Comment:

7. What suggestions do you have for improving SPIF?

a. Content of SPIF

b. Format of SPIF records

c. Search procedures

d. SPIF services

8. For what purposes have you used electronic mail (check all that apply)?

___ never used

___ routine communication

___ receiving requests for information

___ responding to requests for information

___ making requests

___ other, _____

9. Have you encountered any problems in using the SPIN communications system?

☐ yes ☐ no

Comment:

10. What suggestions do you have for improving SPIN?

11. Do you evaluate your information services using client feedback?

☐ yes ☐ no

If yes, describe briefly.

12. Would you be willing to work with ESG in collecting evaluation information from your clients on the utility of SPIF?

☐ yes ☐ no